CLAIMS:

We claim:

1. A method for simulating a run-time user interaction with a voice application, said method comprising the steps of:

loading a user simulation script programmed to specify simulated voice interactions with the voice application;

deriving from the voice application a nominal output, the nominal output including a text stream;

processing the user simulation script to generate a simulated output for the voice application corresponding to the nominal output;

calculating an execution time for the simulated output, the execution time being equal to a length of the text stream divided by an empirical speaking rate of a user; and

executing the simulated output at its calculated execution time in conjunction with the voice application.

2. The method of claim 1, further comprising the steps of:

processing the user simulation script to generate a simulated input for the voice application, the simulated input including a text equivalent of a pre-determined user input;

calculating an execution time for the simulated input, said execution time being equal to a length of the text equivalent of the pre-determined user input divided by the empirical speaking rate of a user; and

executing the simulated input at its calculated execution time in conjunction with the voice application.

3. A method for simulating a run-time user interaction with a voice application, said method comprising the steps of:

loading a user simulation script programmed to specify simulated voice interactions with the voice application;

deriving from the voice application a nominal output, the nominal output including an audio stream;

processing the user simulation script to generate a simulated output for the voice application corresponding to the nominal output;

calculating an execution time for the simulated output based on a sampling rate and a number of samples associated with the audio stream; and

executing the simulated output at its calculated execution time in conjunction with the voice application.

4. The method of claim 3, further comprising the steps of:

processing the user simulation script to generate a simulated input for the voice application, the simulated input including an audio equivalent of a pre-determined user input to the voice application;

calculating an execution time for the simulated input based on a sampling rate and a number of samples associated with the audio equivalent; and

executing the simulated input at its calculated execution time in conjunction with the voice application.

5. A machine readable storage having stored thereon a computer program for simulating a run-time user interaction with a voice application, said computer program comprising a routine set of instructions which when executed by a machine cause the machine to perform the steps of:

loading a user simulation script programmed to specify simulated voice interactions with the voice application;

deriving from the voice application a nominal output, the nominal output including a text stream;

processing the user simulation script to generate a simulated output for the voice application corresponding to the nominal output;

calculating an execution time for the simulated output, the execution time being equal to a length of the text stream divided by an empirical speaking rate of a user; and

executing the simulated output at its calculated execution time in conjunction with the voice application.

6. The machine readable storage of claim 5, further causing said machine to perform the steps of:

processing the user simulation script to generate a simulated input for the voice application, the simulated input including a text equivalent of a pre-determined user input;

calculating an execution time for the simulated input, said execution time being equal to a length of the text equivalent of the pre-determined user input divided by the empirical speaking rate of a user; and

executing the simulated input at its calculated execution time in conjunction with the voice application.

7. A machine readable storage having stored thereon a computer program for simulating an execution time user interaction with a voice application, said computer program comprising a routine set of instructions for causing the machine to perform the steps of:

loading a user simulation script programmed to specify simulated voice interactions with the voice application;

deriving from the voice application a nominal output, the nominal output including an audio stream;

processing the user simulation script to generate a simulated output for the voice application corresponding to the nominal output;

calculating an execution time for the simulated output based on a sampling rate and a number of samples associated with the audio stream; and

executing the simulated output at its calculated execution time in conjunction with the voice application.

8. The machine readable storage of claim 7, further causing said machine to perform the steps of:

processing the user simulation script to generate a simulated input for the voice application, the simulated input including an audio equivalent of a pre-determined user input to the voice application;

calculating an execution time for the simulated input based on a sampling rate and a number of samples associated with the audio equivalent; and

executing the simulated input at its calculated execution time in conjunction with the voice application.

9. A simulation tool for simulating a run-time user interaction with a voice application running on an application server, said tool being configured to load a user simulation script programmed to specify simulated voice interactions with the voice application, and to: (i) first process the voice application to derive a nominal output of the voice application, the nominal output including a text stream; (ii) second process the user simulation script to generate a simulated output for the voice application corresponding to the nominal output; (iii) calculate an execution time for the simulated output, said execution time being equal to a length of the text stream divided by an empirical speaking rate of a user; and (iv) execute the simulated output at its calculated execution time in conjunction with the voice application.

10. The simulation tool of claim 9,

wherein the tool is further configured to: (i) process the user simulation script to generate a simulated input for the voice application, the simulated input including a text equivalent of a pre-determined user input; (ii) calculate an execution time for the simulated input, said execution time being equal to a length of the text equivalent of the pre-determined user input divided by the empirical speaking rate of a user; and (iii) execute the simulated input at its calculated execution time in conjunction with the voice application.

11. A simulation tool for simulating a run-time user interaction with a voice application running on an application server, said tool being configured to load a user simulation script programmed to specify simulated voice interactions with the voice application, and to: (i) first process the voice application to derive a nominal output of the voice application, the nominal output including an audio stream; (ii) second process the user simulation script to generate a simulated output for the voice application corresponding to the nominal output; (iii) calculate an execution time for the simulated output based on a sampling rate and a number of samples associated with the audio stream; and (iv) execute the simulated output at its calculated execution time in conjunction with the voice application.

12. The simulation tool of claim 11,

wherein the tool is further configured to: (i) process the user simulation script to generate a simulated input for the voice application, the simulated input including a audio equivalent of a pre-determined user input; (ii) calculate an execution time for the simulated input based on a sampling rate and a number of samples associated with the audio equivalent; and (iii) execute the simulated input at its calculated execution time in conjunction with the voice application.